In the Claims:

Claims 7-15 have been withdrawn from consideration. Claims 1-6 and 16-21 have been cancelled. Please amend Claims 22, 33, 34, 36, and 39, and add new Claims 53-56, such that the claims are as set forth below.

1-6. (Cancelled)

7. (Withdrawn) An optical coating for a substrate, comprising:

a first anti-reflection layer of a dielectric;

a first metallic layer over the first anti-reflection layer;

a second anti-reflection layer of a dielectric over the first metallic layer;

a second metallic layer over the second anti-reflection layer; and

a third anti-reflection layer of a dielectric over the second metallic layer;

wherein at least one of the first anti-reflection layer, the second anti-reflection layer, and the third anti-reflection layer comprises an amorphous material, the amorphous material comprising titanium oxide and an additive, wherein the additive in an oxidized state does not form a solid solution with the titanium oxide.

8. (Withdrawn) The optical coating according to claim 7, wherein the additive is selected from a group consisting of silicon, aluminum, bismuth, gadolinium, tantalum, zinc, and any combination thereof.

9. (Withdrawn) The optical coating according to claim 7, wherein the second metallic layer comprises silver.

10. (Withdrawn) The optical coating according to claim 7, further comprising a barrier layer between the second anti-reflection layer and the second metallic layer.

11. (Withdrawn) The optical coating according to claim 7, further comprising a barrier layer between the second metallic layer and the third anti-reflection layer.

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12. (Withdrawn) The optical coating according to claim 10 or 11, wherein the barrier layer comprises a material selected from a group consisting of titanium, nickel-chromium, aluminum, and zinc.

13. (Withdrawn) An optical coating for a substrate, comprising:

a first high-refractive index layer;

a first low-refractive index layer over the first high-refractive index layer;

a second high-refractive index layer over the first-low refractive index layer; and

a second low-refractive index layer over the second-high refractive index layer;

wherein at least one of the first high-refractive index layer and the second high-refractive index layer comprises an amorphous material, the amorphous material comprising titanium oxide and an additive, wherein the additive in an oxidized state does not form a solid solution with the titanium oxide.

14. (Withdrawn) The optical coating according to claim 13, wherein the additive is selected from a group consisting of silicon, aluminum, bismuth, gadolinium, tantalum, zinc, and any combination thereof.

15. (Withdrawn) The optical coating according to claim 13, wherein at least one of the first low-refractive index layer and the second low-refractive index layer comprises a material selected from a group consisting of silicon dioxide and silver.

16-21. (Cancelled)

22. (Currently Amended) An optical coating for a substrate, comprising:

a first anti-reflection layer of a dielectric;

a first metallic layer over the first anti-reflection layer; and

a second anti-reflection layer of a dielectric over the first metallic layer;

wherein at least one of the first anti-reflection layer and the second anti-reflection layer comprises an amorphous material, the amorphous material comprising titanium oxide

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and an additive, wherein the additive in an oxidized state does not form a solid solution with the titanium oxide.

23. (Previously Presented) The optical coating according to claim 22, wherein the additive is selected from a group consisting of silicon, aluminum, bismuth, gadolinium, tantalum, zinc, and any combination thereof.

24. (Previously Presented) The optical coating according to claim 22, wherein the first metallic layer comprises silver.

25. (Previously Presented) The optical coating according to claim 22, further comprising a barrier layer between the first anti reflection layer and the first metallic layer.

26. (Previously Presented) The optical coating according to claim 22, further comprising a barrier layer between the first metallic layer and the second anti-reflection layer.

27. (Previously Presented) The optical coating according to claim 25 or 26, wherein the barrier layer comprises a material selected from a group consisting of titanium, nickel-chromium, aluminum, and zinc.

28. (Previously Presented) The optical coating according to claim 22, wherein the amorphous material remains substantially unchanged in amorphism at a heat-treatment temperature of the substrate.

29. (Previously Presented) The optical coating according to claim 22, wherein the amorphous material remains substantially unchanged in refractive index at a heat-treatment temperature of the substrate.

30. (Previously Presented) The optical coating according to claim 22, wherein the amorphous material remains substantially unchanged in size at a heat-treatment temperature of the substrate.

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31. (Previously Presented) The optical coating according to claim 28, 29, or 30, wherein the heat-treatment temperature is below a crystallization temperature of the amorphous material.

32. (Previously Presented) The optical coating according to claim 28, 29, or 30, wherein the heat-treatment temperature is selected from a group consisting of a frit-sealing temperature, a heat-strengthening temperature, a shaping or bending temperature, and a tempering temperature.

33. (Currently Amended) The optical coating according to claim 22, wherein the amorphous material of the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material is sufficient to reduce atmospheric oxidation of ~~an underlying~~ a layer underlying the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material.

34. (Currently Amended) The optical coating according to claim 22, wherein the amorphous material of the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material is sufficient to reduce contaminant migration to ~~an overlying~~ a layer overlying the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material.

35. (Previously Presented) The optical coating according to claim 22, wherein the amorphous material is sufficient to reduce haze.

36. (Currently Amended) The optical coating according to claim 22, wherein the amorphous material of the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material is sufficient to reduce contaminant interdiffusion between ~~an underlying~~ a layer underlying the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material and ~~an overlying~~ a layer overlying the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material.

37. (Previously Presented) The optical coating according to claim 22, wherein a crystallization temperature of the amorphous material is above about 300 °C.

38. (Previously Presented) The optical coating according to claim 22, wherein a refractive index of the amorphous material is above about 2.1.

39. (Currently Amended) A method of processing a substrate, comprising:

depositing a first anti-reflection layer of a dielectric over a the substrate;

depositing a metallic layer over the first anti-reflection layer; and

depositing a second anti-reflection layer of a dielectric over the metallic layer;

wherein at least one of the first anti-reflection layer and the second anti-reflection layer comprises an amorphous material, the amorphous material comprising titanium oxide and an additive, wherein the additive in an oxidized state does not form a solid solution with the titanium oxide.

40. (Previously Presented) The method of claim 39, wherein at least one of the depositing a first anti-reflection layer, the depositing a metallic layer, and the depositing a second anti-reflection layer comprises sputtering.

41. (Previously Presented) The method of claim 39, wherein at least one of the depositing a first anti-reflection layer and the depositing a second anti-reflection layer comprises sputtering, in an oxygen environment, a target comprising titanium and the additive.

42. (Previously Presented) The method of claim 39, wherein at least one of the depositing a first anti-reflection layer and the depositing a second anti-reflection layer comprises sputtering, in an oxygen environment, a first target comprising titanium and a second target comprising the additive.

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43. (Previously Presented) The method of claim 39, wherein the additive is selected from a group consisting of silicon, aluminum, bismuth, gadolinium, tantalum, zinc, and any combination thereof.

44. (Previously Presented) The method of claim 39, wherein the amorphous material is deposited at a high absolute deposition rate.

45. (Previously Presented) The method of claim 44, wherein the absolute deposition rate is greater than about five angstroms per second.

46. (Previously Presented) The method of claim 39, wherein the amorphous material is deposited at a low temperature.

47. (Previously Presented) The method of claim 46, wherein the temperature is in a range of about 20 °C to about 40 °C.

48. (Previously Presented) The method of claim 39, wherein the amorphous material is deposited at a high absolute deposition rate and a low temperature.

49. (Previously Presented) The method of claim 39, further comprising, after said depositing of the first anti-reflection layer, the metallic layer, and the second anti-reflection layer, heating the substrate to at least a heat-treatment temperature of the substrate.

50. (Previously Presented) The method of claim 49, wherein the heat-treatment temperature is below a crystallization temperature of the amorphous material.

51. (Previously Presented) The method of claim 49, wherein the heat-treatment temperature is selected from a group consisting of a frit-sealing temperature, a heat-strengthening temperature, a shaping or bending temperature, and a tempering temperature.

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52. (Previously Presented) The method of claim 49, further comprising at least one of fritting, heat-strengthening, shaping or bending, and tempering of the substrate.

53. (New) The optical coating according to claim 22, wherein at least the second anti-reflection layer comprises the amorphous material and is sufficient to reduce atmospheric oxidation of the first metallic layer.

54. (New) The optical coating according to claim 22, wherein at least the first anti-reflection comprises the amorphous material and is sufficient to reduce contaminant migration to the first metallic layer.

55. (New) The optical coating according to claim 22, wherein at least the second anti-reflection layer comprises the amorphous material and is sufficient to reduce contaminant interdiffusion between the first metallic layer and a layer overlying the second anti-reflection layer.

56. (New) The optical coating according to claim 22, wherein at least the first anti-reflection layer comprises the amorphous material and is sufficient to reduce contaminant interdiffusion between the substrate and the first metallic layer.

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